IN THE CLAIMS

Amend claims 1-8, 12-21, 26-35, 40-42, 44-47, 49-52, 54, 56, 58, 61, 66-75 to read:

1. A potato starch which, when in native form extracted from a potato plant, exhibits freeze-thaw stability such that a 1%w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 1.2 units following 4 freeze/thaw cycles of freezing at –70°C overnight and thawing at room temperature for at least 2 hours.

2. The potato starch according to claim 1, wherein the 1%w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 1.0 units following 4 freeze/thaw cycles.

3. The potato starch of claim 1 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability such that a 1%w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 0.9 units following 3 freeze/thaw cycles of freezing at –70°C overnight and thawing at room temperature for at least two hours.

4. The potato starch according to claim 3, wherein the 1% w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 0.7 units following 3 freeze/thaw cycles.

5. The potato starch of claim 1 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability such that a 1%w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 0.7 units following 2 freeze/thaw cycles of freezing at –70°C overnight and thawing at room temperature for at least two hours.

6. The potato starch according to claim 5, wherein the 1% w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 0.5 units following 2 freeze/thaw cycles.

7. The potato starch of claim 1 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability such that a 1%w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 0.5 units following 1 freeze/thaw cycle of freezing at –70°C overnight and thawing at room temperature for at least 2 hours.

8. The potato starch according to claim 7, wherein a 1% w/v aqueous suspension of the starch has an absorbance at 700nm wavelength of less than 0.3 units following 1 freeze/thaw cycle.

12. A potato starch which, when in native form extracted from a potato plant, exhibits freeze-thaw stability, such that a 5% w/v aqueous paste of the starch exhibits less than 40% syneresis following 4 freeze/thaw cycles of freezing at -70°C overnight and thawing at 22°C for 60 minutes, and then spinning at 8,000g for 10 minutes at 18°C.

13. The potato starch according to claim 12, which exhibits less than 30% syneresis following 4 freeze/thaw cycles.

14. The potato starch according to claim 12, which exhibits less than 20% syneresis following 4 freeze/thaw cycles.

15. The potato starch according to claim 12, which exhibits less than 10% syneresis following 4 freeze/thaw cycles.

16. The potato starch of claim 12 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability, such that a 5% w/v aqueous paste of the starch exhibits less than 30% syneresis following 3 freeze/thaw cycles of freezing at –70°C overnight and thawing at 22°C for 60 minutes, and then spinning at 8,000g for 10 minutes at 18°C.

17. The potato starch according to claim 16, which exhibits less than 20% syneresis following 3 freeze/thaw cycles.

18. The potato starch according to claim 16, which exhibits less than 10% syneresis following 3 freeze/thaw cycles.

19. The potato starch of claim 12 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability, such that a 5% w/v aqueous paste of the starch exhibits less than 30% syneresis following 2 freeze/thaw cycles of freezing at –70°C overnight and thawing at 22°C for 60 minutes, and then spinning at 8,000g for 10 minutes at 18°C.

20. The potato starch according to claim 19, which exhibits less than 20% syneresis following 2 freeze/thaw cycles.

21. The potato starch according to claim 19, which exhibits less than 10% syneresis following 2 freeze/thaw cycles.

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26. A potato starch which, when in native form extracted from a potato plant, exhibits freeze-thaw stability, such that a 5% w/v aqueous paste of the starch exhibits less than 40% syneresis following 4 freeze/thaw cycles of freezing at –70°C for 1 hour and thawing at 22°C for 10 minutes, and then spinning at 8,000g for 10 minutes at 18°C.

27. The potato starch according to claim 26, which exhibits less than 30% syneresis following 4 freeze/thaw cycles.

28. The potato starch according to claim 26, which exhibits less than 20% syneresis following 4 freeze/thaw cycles.

29. The potato starch of claim 1 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability, such that a 5% w/v aqueous paste of the starch exhibits less than 40% syneresis following 3 freeze/thaw cycles of

freezing at –70°C for 1 hour and thawing at 22°C for 10 minutes, and then spinning at 8,000g for 10 minutes at 18°C.

30. The potato starch according to claim 29, which exhibits less than 30% syneresis following 3 freeze/thaw cycles.

31. The potato starch according to claim 29, which exhibits less than 20% syneresis following 3 freeze/thaw cycles.

32. The potato starch according to claim 29, which exhibits less than 10% syneresis following 3 freeze/thaw cycles.

33. The potato starch of claim 1 which, when in native form extracted from a potato plant, exhibits freeze-thaw stability, such that a 5% w/v aqueous paste of the starch exhibits less than 30% syneresis following 2 freeze/thaw cycles of freezing at –70°C for 1 hour and thawing at 22°C for 10 minutes, and then spinning at 8,000g for 10 minutes at 18°C.

34. The potato starch according to claim 33, which exhibits less than 20% syneresis following 2 freeze/thaw cycles.

35. The potato starch according to claim 33, which exhibits less than 10% syneresis following 2 freeze/thaw cycles.

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40. A potato starch which, when in native form extracted from a potato plant, has an apparent amylose content of less than 8% as determined by the method of Morrison & Laignelet (1983 Cereal Science 1, 9-20) and a ratio of fraction I to fraction II short chain glucans of at least 60%.

41. The potato starch according to claim 40, having a fraction I to fraction II ratio of at least 65%.

42. The potato starch according to claim 40, having a fraction I to fraction II ratio of at least 70%.

44. A potato starch which, when in native form extracted from a potato plant, has an apparent amylose content of less than 8%, as determined by the method of Morrison & Laignelet (1983 Cereal Science 1, 9-20), and a viscosity onset temperature of less than 67°C as determined by viscometric analysis of a 7.4% (w/v) aqueous suspension of the starch using a Rapid Visco Amylograph, Newport Scientific Series 4 instrument operating on the standard 1 heating and stirring protocol.

45. The starch according to claim 44, having a viscosity onset temperature of less than 65°C.

46. The starch according to claim 44, having a viscosity onset temperature of less than 55°C.

47. The starch according to claim 44, having a viscosity onset temperature of less than 51°C.

49. A potato starch which, when in native form extracted from a potato plant, has an apparent amylose content of less than 8% as determined by the method of Morrison & Laignelet (1983) and, when analysed by differential scanning calorimetry using a Perkin Elmer DSC7 instrument a 10mg starch sample in aqueous mix of less than 25% starch w/v exhibits a gelatinisation onset temperature of less than 67°C.

50. The potato starch according to claim 49, which exhibits a gelatinisation onset temperature of less than 66°C.

51. The potato starch according to claim 49, which exhibits a gelatinisation onset temperature of less than 51°C.

52. The potato starch according to claim 49, which exhibits a gelatinisation onset temperature of less than 50°C.

54. The starch of claim 1, wherein the starch granules are substantially free of cracks.

56. The plant cell according to claim 55, wherein the said at least one further starch synthase enzyme specifically inhibited by the introduced nucleic acid sequences comprises starch synthase II and/or starch synthase III.

58. The plant cell according to claim 55 which synthesises freeze/thaw stable starch as a result of the introduction of the nucleic acid sequences.

61. The plant according to claim 60, in which the introduced nucleic acid sequences specifically inhibit GBSSI, and one or both of SSII and SSIII.

66. The method according to claim 65, wherein the sequences are introduced into a plant cell, and the plant cell is grown into a plantlet and subsequently into a plant.

67. The method according to claim 65, wherein the sequences are introduced into a potato plant or plant cell.

68. The method according to claim 65, wherein the introduced sequences specifically inhibit the expression of GBSSI and one or both of SSII and SSIII.

69. The method of claim 65, wherein the introduced nucleic acid sequences are operably linked in the antisense orientation to a promoter active in the plant, so as to cause transcription of the sequences.

70. A plant produced by the method of claim 65.

71. Starch obtained from a plant altered by the method of claim 65.

72 A method of making starch, the method comprising the steps of: altering the starch content of a plant by the method of claim 65; and extracting the altered starch content from the plant.

73. The method according to claim 72, further comprising the step of modifying the extracted starch by physical, and/or enzymatic and/or chemical processing *in vitro*.

74. A potato starch which, when in native form extracted from a potato plant, exhibits freeze-thaw stability.

Amd 1 Cont

75. A composition comprising the starch of claim 1, wherein the composition is selected from the group consisting of a thickener composition; a packaging material; an adhesive; a paper; a coating; and a personal care product.

Cancel claims 9-11, 22-25, 36-39, 43, 48, 53, 59, 62-64, and 76-79.

Add new claim 80 to read:

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80. A composition comprising the starch of claim 74, wherein the composition is selected from the group consisting of a thickener composition; a packaging material; an adhesive; a paper; a coating; and a personal care product.